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# MONTANA TEACHERS' RETIREMENT SYSTEM

DEPARTMENT OF ADMINISTRATION

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## BIENNIAL REPORT

JUL 22 1992





# The Teachers' Retirement System



## State of Montana

1500 Sixth Ave. Phone 406-444-3134

HELENA, MONTANA 59620-0139

### MEMBERS OF THE BOARD

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EDWARD F. ARGENBRIGHT  
State Supt. of Public Instruction, Ex Officio

DAVID L. SENN, Executive Secretary  
MARY L. ANDRIDGE, Ass't Executive Secretary

December 10, 1986

The Honorable Ted Schwinden  
Governor  
State of Montana  
State Capitol  
Helena, MT 59620

Dear Governor Schwinden:

On behalf of the Teachers' Retirement Board and in accordance with 19-4-201(4), we are pleased to submit herewith, the biennial report of the Teachers' Retirement System, for the two fiscal years 1984-85 and 1985-86.

The report consists of four sections, the Financial Section, which provides financial statements of the system, along with accompanying footnotes; the Actuarial Sections, which includes the independent consulting actuary's analysis and results of the biennial valuation; the Investment Section, which gives a detailed listing of investments; the Statistical Section, which contains historical data of the system's contribution rates, revenues and expenditures over a given period of time.

The Teachers' Retirement Board is dedicated to a policy that the system be maintained on an actuarially sound basis to assure the broadest and fairest possible range of disability, death, and retirement benefits to teachers of Montana as prescribed by state statutes.

Sincerely,

A handwritten signature in cursive script, reading "David L. Senn".

David L. Senn  
Executive Secretary

DLS:dlh





# T A B L E O F C O N T E N T S

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PRINCIPAL OFFICES AND OFFICERS  
THE TEACHERS' RETIREMENT SYSTEM

TEACHERS' RETIREMENT BOARD

MEMBER

TERM

ADDRESS

J. WILLIAM KEARNS, JR., CHAIRMAN	7/01/85 to 7/01/89	210 North Walnut Townsend, MT 59644
J. THOMAS RYAN, VICE CHAIRMAN	7/01/85 to 7/01/89	1057 Phillips Lane Helena, MT 59601
LEROY CORBIN	7/01/86 to 7/01/90	1208 West Silver Butte, MT 59701
JAMES E. BURKE	7/01/84 to 7/01/89	216 South 5th Livingston, MT 59047
KENNETH M. MESKE*	7/01/83 to 7/01/87	3437 12th Avenue S. Great Falls, MT 59405
EDWARD F. ARGENBRIGHT	Ex Officio	Office Public Instruction State Capitol Helena, MT 59620

ADMINISTRATIVE OFFICERS

DAVID L. SENN	Executive Secretary
MARY L. ANDRIDGE	Assistant Executive Secretary

LEGAL ADVISOR

BEDA J. LOVITT	Department of Administration
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PROFESSIONAL CONSULTANTS

HENDRICKSON & ASSOCIATES INC.	Actuarial Consultants Helena, MT 59601
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\*Kenneth M. Meske is currently the Chairman as of 8/01/86 (Fiscal Year 1987)



FINANCIAL SECTION

BALANCE SHEET

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN FUND BALANCE

STATEMENT OF CHANGES IN FINANCIAL POSITION

NOTES TO FINANCIAL STATEMENTS





TEACHERS' RETIREMENT SYSTEM  
BALANCE SHEET  
JUNE 30, 1986

ASSETS:

Current Assets:

Cash	\$8,178,842
Accounts Receivable	4,930,100
Interest Receivable	8,154,776

Investments:

Mortgages	54,633,058	
Securities	309,782,274	
Common Stock	50,771,713	
Land and Buildings	193,844	
Less: Accumulated Depreciation on Buildings	<u>(60,846)</u>	
Total Investments		415,320,043

Other Assets:

Equipment	46,994	
Less: Accumulated Depreciation on Equipment	<u>(18,179)</u>	
Deferred Losses (Footnote A)		<u>7,812,930</u>

TOTAL ASSETS	<u>\$444,425,506</u>
--------------	----------------------

LIABILITIES AND FUND BALANCE:

Current Liabilities:

Accounts Payable	\$978,245
Accrued Expenditures	10,928
Other Liabilities:	
Compensated Absence	27,494

Fund Balance:

Pension Accumulation	183,267,503	
Annuity Savings	89,473,109	
Annuity Interest Savings	170,668,227	
Total Fund Balance		<u>443,408,839</u>

TOTAL LIABILITIES AND FUND BALANCE	<u>\$444,425,506</u>
------------------------------------	----------------------

The footnotes to the financial statements are an integral part of this statement.

TEACHERS' RETIREMENT SYSTEM  
STATEMENT OF REVENUES, EXPENSES, AND  
CHANGES IN FUND BALANCE  
FOR THE TWO FISCAL YEARS ENDED JUNE 30, 1985 AND 1986

	<u>1986</u>	<u>1985</u>
OPERATING REVENUES:		
Membership Contributions	\$27,603,165	\$26,630,671
Employer Contributions	27,322,124	26,104,746
Investment Earnings	<u>45,270,441</u>	<u>35,253,551</u>
Total Operating Revenue	<u>100,195,730</u>	<u>87,988,968</u>
OPERATING EXPENSES:		
Benefit Payments	37,633,013	32,498,499
Withdrawals	4,647,911	4,812,090
Administrative Expenses	378,827	334,023
Total Operating Expenses	<u>42,659,751</u>	<u>37,644,612</u>
OPERATING TRANSFERS IN:		
Public Employees' Retirement System	54,989	216,828
OPERATING INCOME	<u>57,590,968</u>	<u>50,561,184</u> <sup>*</sup>
FUND BALANCE, JULY 1	378,965,975	328,730,597
Adjustments to Fund Balance	134	(100,459) <sup>2</sup>
Prior Year Adjustments	<u>6,851,764</u> <sup>1</sup>	<u>(225,347)</u>
ENDING FUND BALANCE	<u>\$443,408,841</u>	<u>\$378,965,975</u>

1 - See footnote F

2 - See footnote G

\* - To present on a consistent basis the accrued interest revenue is not included in Fiscal year 1985 because of the prior year adjustment of \$6,851,764.

The footnotes to the financial statements are an integral part of this statement.



TEACHERS' RETIREMENT SYSTEM  
STATEMENT OF CHANGES IN FINANCIAL POSITION  
FOR THE FISCAL YEARS ENDED JUNE 30, 1985 AND 1986

	<u>1986</u>	<u>1985</u>
RESOURCES PROVIDED BY OPERATIONS:		
Net Operating Income	\$57,590,968	\$51,361,343*
Add Items Not Requiring the Use of Working Capital:		
Depreciation	6,458	5,616
Deferred Gains-Losses (86)	2,758,455	1,272,573
Prior Year Adjustment	6,851,764	
Fund Balance Adjustment	134	
	<hr/>	<hr/>
TOTAL RESOURCES PROVIDED	\$67,207,779	\$52,639,532
RESOURCES APPLIED TO:		
Investments	\$55,506,753	\$50,814,339
Deferred Losses		766,229
Equipment Purchases	8,976	15,724
Unamortized Mortgage Discount	20,012	14,635
Fund Balance Adjustments		100,459
Prior Year Adjustment		225,347
	<hr/>	<hr/>
Total Resources Applied	\$55,535,741	\$51,936,733
NET INCREASE IN WORKING CAPITAL	<u>\$11,672,038</u>	<u>\$ 702,799</u>
ELEMENTS OF NET INCREASE IN WORKING CAPITAL:		
Cash	\$3,896,898	\$153,258
Accounts Receivable	(112,484)	(461,788)
Interest Receivable	8,154,776	800,159
Employee Advances	(258)	258
Accounts Payable	(462,774)	150,058
Accrued Expenditures	223,374	60,854
Compensated Absences	(274,944)	
	<hr/>	<hr/>
NET INCREASE IN WORKING CAPITAL	<u>\$11,672,038</u>	<u>\$ 702,799</u>

The footnotes to the financial statements are an integral part of this statement.

\* Revenue adjusted by the manual adjustment for Accrued interest receivable was used to determine the change in Financial position for FY85 (is 50,561,184 + 800,159 = 51,361,343).

TEACHERS' RETIREMENT SYSTEM  
NOTES TO THE FINANCIAL STATEMENTS  
FISCAL YEAR ENDED JUNE 30, 1986

NOTE A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The Teachers' Retirement System maintains its accounts on the full accrual basis of accounting.

Valuation of Investments

Short-term investment and state securities are stated at cost. Federal and corporate securities are stated at book value increased by the amount of unamortized premiums (\$1,817,925 in fiscal year 1986) and decreased by unamortized discounts (\$14,407,898 in fiscal year 1986). Mortgages were decreased by unaccumulated mortgage discount of \$109,058 in fiscal year 1986.

Market value of the investments were as follows:

	<u>June 30, 1986</u>
Montana Common Stock Pool	\$ 96,917,121
Common Stock	162,998
Securities	3,482,395
Bankers Commercial Paper Acceptances	24,878,476
U.S. Governmental Securities	75,958,871
Municipal Bonds	1,194,000
Corporate Bonds	232,944,323
Securities Subtotal	<u>435,538,184</u>
 Montana Common	
Montana Mortgages	54,742,116
Land and Buildings	136,000
	<u>\$490,416,300</u>

## Gains and Losses on Bond Swaps

The deferral and amortization method was used for accounting for gains and losses on bond swaps (i.e., the unamortized deferred gains or losses are netted against the investment account and written off over the life of either the bond sold or acquired, whichever is less).

### NOTE B. DESCRIPTION OF PLAN

The Teachers' Retirement System is a defined benefit plan that covers all teachers in the state of Montana. The member's contribution to the plan is 7.044 percent of the member's salary and is deducted by the employer and sent to the Retirement System to be credited to the member's individual account. The employer pays an amount equal to 7.428 percent of the member's salary to the Retirement System.

A detailed description of the Teachers' Retirement System plan can be found in the Montana Code Annotated, Title 19, Chapter 4, and in the Montana Teachers' Retirement System Handbook of Information available upon request from the Teachers' Retirement System, 1500 Sixth Avenue, Helena, Montana 59620.

### NOTE C. UNFUNDED ACCRUED LIABILITY

#### Method of Funding

The method of funding employed in the actuarial valuation as of July 1, 1985, is commonly referred to as the entry age normal cost method. This method establishes a normal cost of the system, as well as an unfunded percentage of total salaries



required to fund the benefits, assuming this percentage had been contributed since each member's entry into the system.

The unfunded accrued liability represents the excess of the present value of total liabilities over the present assets of the system and the present value of expected future contributions for normal costs. The unfunded accrued liability was calculated to be \$559,132,131 as of June 30, 1985. The amortization period of the unfunded liability was determined to be 37.55 years.

The actuary concluded that the Retirement System is funded on an actuarially sound basis. This means that the present employee/employer contribution rate is sufficient to fund the actuarial liability.

#### NOTE D. REPORTING

The financial statements for this period reflect the activity in the following accounting entities: 09506 - Teachers' Retirement Agency Account, and 08002 - Teachers' Retirement Fullam Estate Agency Account.

#### NOTE E. COMPENSATED ABSENCES

Compensated absences represent 100 percent of accrued vacation and 25 percent of accrued sick leave for division personnel at June 30, 1986.

#### NOTE F. PRIOR YEAR ADJUSTMENTS

The prior year adjustment of \$6,851,762 in fiscal year 1986 resulted from the Department of Administration's decision to

change state accounting policy and record interest receivable on the state's accounting system. In prior years the financial statements were manually adjusted for interest receivable.

NOTE G. DIRECT ENTRIES TO FUND BALANCE

Direct entries to fund balance in fiscal year 1985 of (\$100,459) primarily resulted from the closure of an accounting entity maintained by Department of Administration.





# ACTUARIAL SECTION

INTRODUCTION

ANALYSIS OF VALUATION

NORMAL COST ALLOCATION

PRESENT VALUE AND BENEFITS

CONTRIBUTION AND LIABILITY ALLOCATIONS

VALUATION COMPARISON

COMPARISON CONTRIBUTING MEMBERS/MEMBERS  
RECEIVING BENEFITS

ACTUARIAL FUNDING METHOD AND ASSUMPTIONS

DISCUSSION OF ACTUARIAL ASSUMPTIONS

SUMMARY OF BENEFIT PROVISIONS

This information was compiled from the actuarial valuation  
of July 1, 1985 by Hendrickson and Associates



## INTRODUCTION

An actuarial valuation of the Teachers' Retirement System of the State of Montana has been completed as of July 1, 1985. This valuation was authorized by the Teachers' Retirement Board under Section 19-4-203, M.R.C. The purpose of the valuation was to determine the financial position of the fund, the normal cost, and the unfunded accrued liability based upon present and prospective assets and liabilities of the system as of July 1, 1985.

Section II presents an analysis of the results of the actuarial valuation. The numerical findings and membership data supporting this analysis are shown in Section III.

In conducting the actuarial valuation, certain assumptions were made as to the future experience of the system. A summary and discussion of each of the assumptions is contained in Section IV.

The valuation is based upon the Teachers' Retirement Act and incorporates all amendments as of July 1, 1985. A summary of the major provisions of the Act is contained in Section V.

## ACTUARIAL CERTIFICATION

Based upon the assumptions stated in this report and the employee data and other records provided by the Teachers' Retirement System, the actuarial valuation contained in this report has been performed in accordance with generally accepted actuarial principles and techniques.



Alton P. Hendrickson  
Member, American Academy  
of Actuaries

## ANALYSIS OF VALUATION

### Summary of Findings

An actuarial valuation of the Montana Teachers' Retirement System was conducted as of July 1, 1985. This valuation concluded that the system is funded on an actuarially sound basis. The total contribution rate of 14.472% of salaries is sufficient to finance the cost of benefits as they accrue in the future as well as to amortize the current unfunded liability over a period of 37.55 years. The previous actuarial valuation on July 1, 1983 determined that the unfunded liability would be amortized over a period of 40.25 years. The decrease in the amortization period is largely attributable to a change in the actuarial assumptions used in the current valuation.

The employer contribution rate was changed from 7.320% to 7.428% as of July 1, 1985, increasing the total statutory contribution rate to 14.472%. This increase was required to fund the cost of benefit increases granted to retired members.

The liabilities of the system have increased since July 1, 1983. The additional liabilities resulted from an increase in the covered payroll as well as increased benefits to retired members. During the same period, the assets increased by approximately 1/3. The specific effects of the actual experience over anticipated experience are discussed below for active and inactive members.

### Actuarial Assumptions

As part of the actuarial valuation of July 1, 1985, the applicable assumptions were reviewed and compared with past experience. This review and comparison determined that a change in several of the assumptions was warranted. In particular, the long-term annual investment rate assumption was increased from 7% to 8%. This change was made in light of the current investment return on the system's funds as well as anticipated returns in future years.

The future salary increase assumption was increased in conjunction with the investment rate assumption change. Historically, investment earnings and cost-of-living increases have held at a relatively constant spread on a long-term basis. Although cost-of-living indices have not increased substantially in the last several years, the cost-of-living assumption was set at 6.5% in anticipation that investment earnings and cost-of-living increases will follow a historical trend.



The mortality rates were changed to reflect a national trend of increased longevity. This change was accomplished by setting the ages back on the mortality rates one year.

A change was also made in the retirement rate assumption. The number of retirees in the last few years has been significantly higher than in the preceding eight years. In order to properly recognize the liabilities for members electing early retirement, the probability of retirement at each age was increased 5%.

The net effect of the actuarial assumption changes was a decrease in the total liability by 5.2%. The unfunded liability was decreased 5.9% from \$594,483,290 before the changes to \$559,132,131 after the changes. The funding position was affected by reducing the amortization period of the unfunded liability from 40.64 years before the changes to 37.55 years after the changes.

#### Valuation of Active Members

The number of active members grew from 14,243 in 1983 to 14,989 in 1985, representing a 5.2% increase. In the same period, the payroll grew from \$293,239,064 to \$330,241,152. This represented a 12.6% increase. The average salary grew from \$20,588 to \$22,032.

The present value of benefits for active members increased from \$777,759,735 in 1983 to \$844,771,503 in 1985. The liability was increased 14.6% because of the increased payroll. This was offset by a 5.5% decrease in liabilities because of the change in the actuarial assumptions, resulting in 8.6% net change.

The average age of active members of the Teachers' Retirement System is 39.7 years, the average completed service is 9.8 years, and the average salary is \$22,032.

#### Valuation of Inactive Members

The number of members receiving benefits grew from 5,172 in 1983 to 5,672 in 1985. During the same period, the annual benefits grew from \$28,001,676 to \$36,895,176 representing a 31.8% increase. The liability for inactive members grew from \$263,743,569 in 1983 to \$337,169,990 in 1985. The liabilities increased 34.5% due to increased benefits, which were offset 5.2% by a change in the actuarial assumptions, resulting in a net change of 27.8%.

The average age of members receiving benefits is 70.5 years. The average number of years worked prior to retirement is 25.4 years and the average monthly benefit being paid is \$542.

## General

During the biennium, the assets grew from \$291,844,682 to \$390,093,608, representing a 33.7% increase. This increase is the result of contributions to the system as well as investment earnings. The liabilities of the system also increased during the biennium, but the growth in the assets allowed the system to continue to be well funded.

A thorough review was made of the data provided by the Teachers' Retirement System. This review included an examination for completeness and reasonableness. It was concluded that the data maintained is very complete and accurate. A detailed summary of this data is illustrated in Section VI of this report. The active members have been categorized by full-time and part-time members in order to prevent any distortion of the average salaries.

From an actuarial standpoint, the Teachers' Retirement System appears to be well-managed. The system's liabilities are being funded in a manner which will allow the unfunded liability to be funded in less than 40 years; investment earnings on assets remain high; and the accounting and record keeping systems provide complete and accurate data.

# NORMAL COST ALLOCATION

## (1) Normal Cost Contribution Rate:

(a) Retirement	6.071%
(b) Disability	0.264
(c) Survivors	0.340
(d) Vested Terminations	0.328
(e) Withdrawals	1.669
	-----
(f) Total Rate	8.672%

(2) Present Value of Future Salaries Of Current Members	\$2,683,530,369
(3) Normal Cost Contribution Rate	8.672%
(4) Present Value of Future Normal Costs For Current Members (1(f) * (2))	\$ 232,715,754

PRESENT VALUE OF BENEFITS

(1) Present Value of Benefits - Inactive Members

(a) Retirement	\$ 297,522,193
(b) Disability	11,338,805
(c) Survivors	14,098,256
(d) Vested Terminations	9,720,870
(e) Withdrawals	2,706,623
(f) Tax Sheltered Annuity	1,720,523
(g) Excess Interest Payment	62,720
	-----
(h) Total Inactive	\$ 337,169,990

(2) Present Value of Benefits - Active Members

(a) Retirement	\$ 676,039,063
(b) Disability	15,974,264
(c) Survivors	27,869,812
(d) Vested Terminations	22,010,548
(e) Withdrawals	100,834,178
(f) Tax Sheltered Annuity	1,985,136
(g) Legacy Fund	58,502
	-----
(h) Total Active	\$ 844,771,503
	=====

(3) Total Liabilities \$1,181,941,493



# CONTRIBUTION AND LIABILITY ALLOCATIONS

## (1) Unfunded Accrued Liability

(a) Present Value of Benefits	\$ 1,181,941,493
(b) Present Value of Future Normal Costs	232,715,754
(c) Fund Assets	<u>390,093,608</u>
(d) Unfunded Liability (a)-(b)-(c)	\$ 559,132,131

## (2) Contribution Rates Amortized over 40.00 Years

(a) Present Value of Salaries During Next 40.00 Years	\$10,110,377,712
(b) Unfunded Contribution Rate $1(d)/2(a)$	5.530%
(c) Normal Cost Rate	<u>8.672%</u>
(d) Total Funding Rate	14.202%

## (3) Contribution Rates Amortized over 37.55 Years

(a) Present Value of Salaries During Next 37.55 Years	\$ 9,640,209,155
(b) Unfunded Contribution Rate $1(d)/3(a)$	5.800%
(c) Normal Cost Rate	<u>8.672%</u>
(d) Total Funding Rate	14.472%

# VALUATION COMPARISON

	<u>1984</u>	<u>1985</u>
Present Value of Total Benefits		
Total	\$1,041,159,207	\$1,181,941,493
Average for All Members	53,627	57,206
Unfunded Past Service Liability		
Total	\$ 519,174,525	\$ 559,132,131
Average for All Members	26,741	27,062
Assets		
Total	\$ 291,844,682	\$ 390,093,608
Average for All Members	15,032	18,881
Present Value of Accrued Benefits		
Vested Benefits	\$ 596,865,662	\$ 762,855,401
Nonvested Benefits	<u>11,408,999</u>	<u>19,923,568</u>
Total Benefits	\$ 608,274,661	\$ 782,778,969
Normal Contribution Rate	8.593%	8.672%
Recommended Contribution Rate for Unfunded Past Service Liability	<u>5.798%</u>	<u>5.800%</u>
Total Recommended Contribution Rate	14.391%	14.472%

# COMPARISON OF CONTRIBUTING MEMBERS

	<u>1983</u>	<u>1985</u>
Number of Lives	14,243	14,989
Annual Salaries	\$293,239,064	\$330,241,152
Average Annual Salaries	\$ 20,588	\$ 22,032

# COMPARISON OF MEMBERS RECEIVING BENEFITS

	<u>1983</u>	<u>1985</u>
Number of Lives		
Retired	4,665	5,136
Disabled	227	235
Survivor	<u>280</u>	<u>301</u>
Total	5,172	5,672
Annual Benefit Payments		
Retired	\$25,757,109	\$34,263,876
Disabled	1,053,651	1,203,780
Survivor	<u>1,190,916</u>	<u>1,427,520</u>
Total	\$28,001,676	\$36,895,176
Average Monthly Benefit Payments		
Retired	\$460	\$556
Disabled	386	427
Survivor	<u>354</u>	<u>395</u>
Total	\$451	\$542

## ACTUARIAL FUNDING METHOD AND ASSUMPTIONS

The true cost of the Teachers' Retirement System will be determined by its future experience. In determining the financial requirement of the fund, certain assumptions were made as to the expected future experience. This section summarizes the funding method applied as well as the basic assumptions used.

Any variations in the actual experience of the fund from those assumed in this valuation may cause changes in the projected future costs of the fund. It is therefore necessary that the actuarial assumptions be reviewed from time to time with adjustments as experience warrants. It is also important that regular valuations be performed to determine the financial effect of variations between the actual and assumed experience.

The assumptions shown below were based upon the past experience of the fund together with the projections as to future experience.

### FUNDING METHOD

The method of funding employed is commonly referred to as the entry age normal cost method. This method establishes a normal cost of each fund as well as an unfunded accrued liability. The normal cost is the level percentage of total salaries required to fund the benefits, assuming this percentage has been contributed since each member's entry into the fund.

The unfunded accrued liability represents the excess of the present value of total liabilities over the present assets of the fund and the present value of expected future contributions for the normal cost.

In order to maintain the fund on an actuarially sound basis, the rate of contribution should be such as to meet the normal cost in addition to making progress towards the amortization of the unfunded liability.



## DISCUSSION OF ACTUARIAL ASSUMPTIONS

### Mortality Rates

The 1971 Group Annuity Mortality Table ratio for males and females are applied to active members and those receiving benefits. The mortality rates were set back one year to reflect increased life expectancies.

### Disability Rates

The disability rates for males and females are based upon rates published by the Railroad Retirement board.

### Retirement Rates

The retirement rates are based upon the past experience of the system and projected future experience with a trend toward earlier retirements.

### Withdrawal Rates

The withdrawal rates are based upon the experience of the system. These rates represent the net effect of the experience of the system including the termination of members, the reemployment of terminated members, and the purchase of credit for past service.

### Future Salaries

The rates of salary increase are based upon an underlying cost-of-living assumption of 6.5% per annum. Meritorious service and longevity increases were also taken into account.

### Investment Earnings

The net investment earnings rate is assumed to be 8% compounded annually.

### Administrative Expenses

The administrative expenses of the system are assumed to be funded by excess investment earnings.

### Termination Benefits

All members terminating with less than five years of service are assumed to request an immediate withdrawal of their personal contributions with interest. Members with five or more years of service are assumed to select the benefits most advantageous to them under the given assumptions.

## SUMMARY OF BENEFIT PROVISIONS

Effective Date	September 1, 1937
Vesting Period	5 years. No benefits are payable unless the member has a vested right, except the return of employee contributions with interest.
Final Compensation	Average of highest 3 consecutive years of earned compensation.
Normal Form of Benefits	Life only annuity. All benefits cease upon death; however, in no event will the member receive less than the amount of employee contributions with interest.
Normal Retirement Benefits	
Eligibility:	25 years service or age 60.
Benefit:	The retirement benefit is equal to $1/60$ of final compensation for each year of service.
Early Retirement Benefits	
Eligibility:	5 years of service and age 50.
Benefit:	The retirement benefit is calculated in the same manner as described for normal retirement, but the benefit is reduced $1/2$ of $1\%$ for each of the first 60 months early and $3/10$ of $1\%$ for each of the next 60 months early.
Death Benefits	
Eligibility:	5 years of service.
Benefit:	The death benefit is equal to $1/20$ of final compensation for each year of service accrued at date of death with an actuarial adjustment based on the relation of the member's age at death to the beneficiary's age. A monthly benefit of \$100 is paid to each child until age 18. In addition, a lump sum benefit of \$500 is paid upon the death of an active or retired member.

## Disability Benefits

Eligibility: 5 years of service.

Benefit: The disability benefit is equal to  $1/60$  of final compensation for each year of service accrued at date of disability. The minimum benefit is  $1/4$  of the final compensation.

## Withdrawal Benefits

With less than 5 years of service, the accumulated employee contributions with interest are returned. With more than 5 years, the member may elect a refund of contributions with interest, or may leave the contributions and interest and retain a vested right to retirement benefits.

## Tax Sheltered Annuity

The Teachers' Retirement System sponsors a tax-deferred annuity program for the benefit of its members. The policies of this program have been established in accordance with the guidelines set by the Internal Revenue Service. The benefits provided by this program are determined solely by the value of the member's account (voluntary contributions plus interest) using actuarial tables provided by the Retirement Board.

## Contributions

Employee: 7.044% of compensation

Employer: 7.428% of compensation





INVESTMENT SECTION

COMMERCIAL PAPER

U.S. BANKERS ACCEPTANCE

BANKS AND INSURANCE

CANADIAN

CONVERTIBLE BONDS

INDUSTRIAL

OTHER FINANCIAL

RAILROADS

TRANSPORTATION EXCLUDING RAILROADS

UTILITIES

U.S. GOVERNMENT OBLIGATIONS

STATE DIRECT OR MUNICIPAL

MISCELLANEOUS



## TEACHERS RETIREMENT SYSTEM

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CASH & EQUIVALENTS					
US BANK COMMERCIAL PAPER					
2,000	CITICORP CP	6.720	08/01/86	1,986,187	1,988,260
1,500	GMAC-CP	6.825	07/21/86	1,488,341	1,494,135
3,500	TOTAL US BANK COMMERCIAL PAPER			3,474,528	3,482,395
US BANKERS ACCEPTANCE					
3,000	BAC BANK OF AMERICA SF	6.850	07/21/86	2,973,171	2,988,180
2,200	BAC BANKERS TRUST NY	6.280	07/14/86	2,166,228	2,194,390
1,800	BAC CHASE MANHATTAN BANK NY	6.580	08/18/86	1,773,351	1,783,836
2,000	BAC CITI BANK NY	6.420	07/15/86	1,966,117	1,994,540
1,000	BAC CITIBANK NY	6.460	07/15/86	985,465	997,270
3,000	BAC CITIBANK NY	6.620	07/29/86	2,966,348	2,984,160
2,000	BAC CITIBANK NY	6.780	08/06/86	1,977,023	1,986,640
2,000	BAC IRVING TRUST CO NYOLIS	6.650	08/18/86	1,966,750	1,982,160
2,000	BAC MANUFACTURERS HANOVER TRUST CO NY	6.620	07/16/86	1,976,830	1,994,040
2,000	BAC MANUFACTURERS HANOVER TRUST CO NY	6.570	08/12/86	1,972,625	1,984,120
1,000	BAC SECURITY PACIFIC NATL BK NY	6.350	07/14/86	984,478	997,450
3,000	BAC-CHASE MANHATTAN BANK NY	6.620	07/15/86	2,966,900	2,991,690
25,000	TOTAL US BANKERS ACCEPTANCE			24,675,286	24,878,476
28,500	TOTAL CASH & EQUIVALENTS			28,149,814	28,360,871
CORPORATE BONDS					
BANKS AND INSURANCE					
250	AMERICAN GENERAL INSURANCE CO	9.375	12/15/08	169,698	247,097
500	AMERICAN GENERAL INSURANCE CO	9.375	12/15/08	497,193	494,195
500	AMERICAN GENERAL INSURANCE CO	9.375	12/15/08	497,193	494,195
500	BANKERS TRUST NEW YORK CORP	8.625	11/01/02	499,182	460,080
500	CHEMICAL NEW YORK	8.250	08/01/02	498,292	462,415
400	CHEMICAL NEW YORK	8.250	08/01/02	398,634	369,932
500	CITICORP 3YR EXT NOTES '88	8.750	12/01/00	497,587	499,525
500	CITICORP NOTES	8.450	03/15/07	354,189	456,890
700	CITICORP NOTES	8.450	03/15/07	526,149	639,646
500	CITICORP NOTES	8.450	03/15/07	363,641	456,890
500	CROCKER NATIONAL	8.600	12/01/02	355,555	438,595
2,300	CROCKER NATIONAL	8.600	12/01/02	1,880,799	2,017,537
2,000	FIREMAN'S FUND CORP-SENIOR NOTES (PP)	10.875	02/19/96	2,000,000	2,301,200
1,000	FIRST INTERSTATE BANCORP	12.250	05/15/10	993,626	1,077,660
1,000	FIRST INTERSTATE BANCORP	12.250	05/15/10	850,255	1,077,660
1,951	FIRST INTERSTATE BANKS PP TRI-CITY PROPERTY INVESTOR	13.500	03/01/99	951,022	1,311,581
404	FIRST SECURITY PP	8.500	10/01/97	404,000	410,443

## TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
BANKS AND INSURANCE (continued)					
1,000	IRVING BANK	12.375	11/15/07	981,445	1,112,010
1,000	TRANSAMERICA CORP	11.875	06/01/05	960,078	1,085,720
500	UNITED STATES NATIONAL BANK OF OREGON NOTES	7.750	01/15/02	361,317	452,055
15,505	TOTAL BANKS AND INSURANCE			14,039,855	15,865,326
CANADIAN					
1,000	BC HYDRO & POWER	8.375	06/15/07	1,000,000	937,010
1,000	BC HYDRO & POWER	15.500	07/15/11	994,179	1,470,100
500	BC HYDRO & POWER	15.500	11/15/11	495,990	738,800
2,000	BC HYDRO & POWER	12.500	09/01/13	2,018,830	2,568,160
1,000	BC HYDRO & POWER	12.500	09/01/13	987,811	1,284,080
1,000	BC HYDRO & POWER	12.500	09/01/13	979,610	1,284,080
725	BC HYDRO & POWER PP	9.625	07/15/96	725,000	737,136
1,000	BELL CANADA	9.000	01/15/08	1,000,000	995,210
1,800	BELL CANADA	13.375	10/15/10	764,972	1,053,600
500	BELL CANADA PP SERIAL BONDS 6-1-95 TO 6-1-04	9.500	06/01/04	500,000	470,940
500	CANADIAN NATL RAILWAY CO	9.700	07/15/04	426,597	512,870
500	CANADIAN NATL RAILWAY CO	9.700	07/15/04	422,571	512,870
1,250	CANADIAN NATL RAILWAY CO	9.700	07/15/04	968,121	1,282,175
500	CANADIAN NATL RAILWAY CO	9.700	07/15/04	369,913	512,870
1,000	CANADIAN NATL RAILWAY CO	15.000	06/01/06	957,970	1,300,300
1,000	CANADIAN NATL RAILWAY CO	14.750	09/01/12	1,000,000	1,330,800
1,437	CANADIAN NATL RAILWAY CO	8.500	07/15/89	437,072	440,530
302	CANADIAN NATL RAILWAY CO	9.000	07/01/91	302,060	284,825
802	CANADIAN NATL RAILWAY CO	9.250	03/15/98	802,000	802,248
166	CANADIAN NATL RAILWAY CO TRUST PP	10.125	07/02/90	166,667	180,956
1,000	HYDRO QUEBEC	13.250	12/15/13	1,000,000	1,359,900
500	IMPERIAL OIL	9.750	09/15/09	499,249	511,490
500	IMPERIAL OIL	9.750	09/15/09	420,415	511,490
500	MANITOBA HYDRO ELECTRIC BOARD	9.250	01/15/06	420,063	499,955
500	MUNICIPAL FINANCE BC	8.875	05/01/01	500,000	490,830
480	MUNICIPAL FINANCE BC	8.875	05/01/01	480,000	471,196
589	MUNICIPAL FINANCE BC	13.750	12/01/05	587,284	731,714
500	NEW BRUNSWICK ELECTRIC POWER	9.375	05/01/01	500,000	504,870
1,000	NEW BRUNSWICK ELECTRIC	8.900	08/01/07	985,669	953,830
500	NOVA SCOTIA POWER	10.500	09/15/00	500,000	534,355
670	ONTARIO HYDRO PP	9.500	03/15/96	670,000	712,216
500	QUEBEC HYDRO ELECTRIC	8.250	01/01/04	498,527	461,090
23,221	TOTAL CANADIAN			22,380,570	26,442,496

## TEACHERS RETIREMENT SYSTEM (Cont Inued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CONVERTIBLE BONDS					
1,000	BURROUGHS CV SUB DEBS	7.250	08/01/10	1,000,000	1,020,000
500	COOPERVISION CV SUB DEBS	8.625	03/01/05	500,000	555,000
500	FLEET FINANCIAL GROUP, INC CV	8.500	04/01/10	500,000	697,500
250	MAXICARE HEALTH PLANS CV DEB	7.000	07/01/10	250,000	310,000
120	PITTSTON CO CV	9.200	07/01/04	155,776	111,600
125	WESTERN AIR LINES CV	7.750	11/01/05	125,000	147,500
2,495	TOTAL CONVERTIBLE BONDS			2,530,776	2,841,600
INDUSTRIAL					
1,000	AMAX INC	14.250	12/15/90	996,651	1,085,000
1,000	AMERICAN CAN COMPANY	11.375	07/01/10	994,937	1,100,740
500	AMERICAN HOSPITAL SUPPLY CORP	7.875	08/15/07	498,943	435,355
1,000	AMERICAN STANDARD	12.375	08/01/10	1,113,726	1,101,570
500	AMOCO CORP (STANDARD OIL OF INDIANA)	7.875	08/01/07	374,407	455,930
1,000	ARCHER DANIELS MIDLAND	10.250	01/15/06	992,659	1,065,980
1,000	ARKLA INC	11.125	05/01/03	1,000,000	1,071,710
2,500	ARMCO STEEL	11.125	05/01/03	2,415,977	2,679,275
500	ATLANTIC RICHFIELD	9.200	07/15/00	375,717	422,500
500	ATLANTIC RICHFIELD	7.750	12/15/03	343,649	451,520
2,275	ATLANTIC RICHFIELD	7.750	12/15/03	1,454,472	2,054,416
271	BERKSHIRE HATHAWAY PP	8.000	03/01/93	271,000	248,932
500	BETHLEHEM STEEL	8.450	03/01/05	500,000	345,000
500	BURLINGTON INDUSTRIES	9.000	08/15/95	405,016	504,535
500	CHEVRON	8.750	07/01/05	406,640	468,115
50	CHEVRON USA INC CALIF FORMERLY GULF OIL CORP	6.625	06/15/93	50,000	45,391
250	CITIES SERVICE	6.625	08/01/99	240,110	184,015
525	CITIES SERVICE	6.625	08/01/99	488,143	386,431
500	CITIES SERVICE GAS	13.000	09/15/05	500,000	548,665
32	DAYTON HUDSON CORP	9.750	06/01/95	32,000	32,278
1,000	DAYTON HUDSON	12.000	04/15/15	984,381	1,120,000
350	DOW CHEMICAL	7.400	07/15/02	238,210	304,241
100	DOW CHEMICAL CO	8.875	05/01/00	72,523	97,235
2,000	DOW CHEMICAL CO	11.250	07/15/10	1,917,084	2,150,820
500	ENGELHARD MINERALS & CHEMICALS NOW PHIBRO SALOMON	11.750	08/01/05	498,091	550,970
500	ENGELHARD MINERALS & CHEMICALS NOW PHIBRO SALOMON	11.750	08/01/05	498,091	550,970
800	ENGELHARD MINERALS & CHEMICALS NOW PHIBRO SALOMON	11.750	08/01/05	620,063	881,552
2,000	ENGELHARD MINERALS & CHEMICALS NOW PHIBRO SALOMON	11.750	08/01/05	1,787,090	2,203,880
1,000	ENSERCH	16.375	04/01/07	1,996,678	1,122,230
66	FOOD MAKER INC PP	8.750	11/01/89	66,663	66,174
176	GENERAL MILLS	8.875	10/15/95	176,000	176,232
900	GENERAL MILLS	8.000	02/15/99	766,890	856,764
1,000	GENERAL MILLS	9.375	03/01/09	720,858	999,290
378	HOOVER CHEMICAL PP	10.500	06/29/96	378,107	413,562
6	HOOVER CHEMICAL PP	10.500	06/29/96	6,878	6,564
500	INCO LIMITED	12.375	07/15/10	496,792	520,000



## TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
INDUSTRIAL (continued)					
200	INGERSOLL RAND	8.050	03/01/04	131,409	173,370
500	INGERSOLL RAND	9.500	09/01/00	498,582	448,265
500	INGERSOLL RAND	7.900	01/15/07	500,000	371,480
1,000	INTERNATIONAL MINERALS & CHEMICAL	11.875	05/01/05	966,542	1,085,460
500	J RAY MCDERMOTT & CO	10.200	12/01/99	450,476	489,240
250	JC PENNEY	9.000	06/15/99	250,000	244,765
300	KERR MCGEE CORP	7.000	11/01/11	181,838	218,595
500	KRAFTCO	8.375	04/15/04	401,700	479,660
96	LUCKY STORES BAKERY PP	16.000	12/10/01	96,285	148,702
774	LUCKY STORES PW WESTVILLE HOLDING CORP PP	16.000	10/29/01	774,137	1,197,285
130	LUCKY STORES PW GENEVA HOLDING CORP PP	16.000	10/29/01	130,009	201,094
250	MARATHON OIL	8.500	02/01/00	249,715	221,580
2,000	MAY DEPT STORES	11.875	04/15/15	1,972,721	2,247,400
2,000	MAY DEPT STORES	11.875	04/15/15	2,226,561	2,247,400
2,875	MOBIL CORP	8.500	06/15/01	684,127	816,987
300	MOBIL CORP	8.500	06/15/01	285,475	280,110
2,100	MOBIL CORP	13.765	09/15/04	2,356,428	2,424,639
1,500	MOTOROLA	8.000	10/01/07	955,267	1,341,840
100	NATIONAL STEEL CORP	8.375	08/01/06	300,000	237,693
5,000	NAVISTAR INTERNATIONAL FORMERLY INTL HARVESTER	6.250	03/01/98	100,000	62,625
1,000	OCCIDENTAL PETROLEUM	11.750	03/15/11	4,950,276	5,108,100
559	OUTBOARD MARINE CORP	7.750	02/01/96	99,808	90,881
1,000	OWENS ILLINOIS	7.625	04/01/01	432,546	488,566
105	OWENS ILLINOIS	9.350	11/01/99	920,223	986,330
2,000	PACKAGING CORP OF AMERICA	4.375	10/01/87	105,000	101,423
2,000	PILLSBURY CO	11.125	11/15/15	1,982,847	2,201,400
207	RESEARCH PROPERTIES INC PP	8.250	11/01/99	207,195	191,278
2,000	REVLOIN INC	10.875	07/15/10	1,886,610	1,945,900
2,000	SCOTT PAPER	8.875	06/01/00	191,837	193,712
2,000	SCOTT PAPER	11.250	06/15/15	1,964,973	2,214,380
500	SEARS ROEBUCK & CO	8.000	04/01/06	499,175	465,810
500	SEARS ROEBUCK & CO	8.000	04/01/06	359,329	465,810
200	SHELL OIL	7.250	02/15/02	131,152	173,914
715	SIGNAL COMPANIES FORMERLY WHEELBRATOR FRYE	11.750	07/15/05	678,885	778,520
1,000	SIGNAL COMPANIES FORMERLY WHEELBRATOR FRYE	11.750	07/15/05	989,817	1,088,840
1,000	ST REGIS PAPER	10.625	06/15/10	969,006	1,052,590
100	STANDARD BRANDS	6.750	06/01/93	76,711	91,708
279	STANDARD OIL OF CALIFORNIA PP VESSEL 1699 OTTO N MIL	7.500	01/01/99	279,650	256,763
400	STANDARD OIL OF INDIANA	6.000	01/15/98	286,027	337,752
2,000	SUPERVALUE STORES	8.875	04/01/16	1,848,758	1,857,700
478	SYSTEMS BUILDING CORP PP	8.000	07/01/97	478,973	451,389
500	TENNECO	12.125	05/01/05	416,689	537,875
1,000	TENNECO	12.125	05/01/05	885,732	1,075,750
1,000	TENNECO	15.000	06/01/06	1,028,802	1,126,120
1,500	TEXAS OIL & GAS	11.500	11/01/02	1,477,893	1,585,230

TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	CORPORATE BONDS (continued)	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
INDUSTRIAL (continued)						
1,900	TRW		9.875	04/15/00	1,772,908	1,877,694
1,000	TRW		11.375	11/15/15	1,000,000	1,118,990
1,000	UNION CARBIDE CORP		8.500	01/15/05	649,091	794,020
1,250	UNION OIL CO OF CALIFORNIA PP		6.625	06/01/98	161,233	198,587
404	UNION OIL CO OF CALIFORNIA PP		7.500	01/01/98	404,992	418,168
250	WESTINGHOUSE ELECTRIC CORP		8.625	09/01/95	225,483	248,005
250	WITCO CHEMICAL		9.500	08/15/09	204,022	243,575
250	WITCO CHEMICAL		9.500	08/15/09	205,300	243,575
500	WITCO CHEMICAL		9.500	08/15/09	498,554	487,150
466	YOUNGSTOWN SHEET & TUBE CO PP NOW LTV STEEL CO INC		4.600	07/01/95	407,578	337,822
70,967	TOTAL INDUSTRIAL				65,866,793	72,481,359
OTHER FINANCIAL						
1,000	AMERICAN EXPRESS CREDIT CORP		11.250	07/01/00	849,787	1,069,620
1,000	AMERICAN EXPRESS CREDIT CORP		11.250	07/01/00	953,380	1,069,620
1,300	ASSOCIATES INVESTMENT CO		7.375	12/01/88	299,716	293,679
500	BENEFICIAL CORP		8.300	06/01/03	500,000	459,705
50	BENEFICIAL FINANCE CO		5.000	11/01/90	46,550	44,253
400	CHANNELVIEW LEASING CO PP		9.250	07/15/96	400,856	425,520
100	CHRYSLER FINANCIAL CORP PP		7.700	03/01/92	99,501	90,206
150	CIT FINANCIAL CORP		4.625	05/01/89	141,138	138,430
1,000	CIT FINANCIAL CORP NOTES PP		14.700	09/01/89	1,003,761	1,196,380
300	CLARK EQUIPMENT CREDIT CORP		7.850	12/15/91	300,000	282,291
250	CNA FINANCIAL CORP		8.500	12/15/95	249,526	239,840
500	GENERAL MOTORS ACCEPTANCE CORP		7.750	10/01/94	450,383	475,145
180	GENERAL MOTORS ACCEPTANCE CORP		8.200	02/15/88	168,028	180,646
300	HELLER WALTER F ACCEPTANCE CORP		9.500	12/01/89	300,000	303,000
300	HOUSEHOLD FINANCE CORP		9.625	06/15/04	270,064	299,340
2,500	HOUSEHOLD FINANCE CORP		9.625	06/15/04	2,268,697	2,494,500
2,200	NAVISTAR INTERNATIONAL	FORMERLY INTL HARVESTER	8.625	08/01/91	200,000	172,000
100	NAVISTAR INTERNATIONAL	FORMERLY INTL HARVESTER	7.500	01/15/94	99,820	81,375
300	NAVISTAR INTERNATIONAL	FORMERLY INTL HARVESTER	7.500	01/15/94	299,461	244,125
300	NAVISTAR INTERNATIONAL	FORMERLY INTL HARVESTER	7.500	01/15/94	299,461	244,125
200	NAVISTAR INTERNATIONAL	FORMERLY INTL HARVESTER	7.500	01/15/94	199,641	162,750
2,000	NORDSTROM CREDIT INC		9.375	02/15/16	1,995,048	1,955,620
2,500	TRANSAMERICA FINANCIAL		9.875	03/01/99	401,078	497,195
12,430	TOTAL OTHER FINANCIAL				11,795,896	12,419,365
RAILROADS						
204	AMERICAN RAIL BOX CAR PP		9.125	11/01/90	204,851	217,980
2,000	BURLINGTON NORTHERN		11.625	08/15/15	1,978,102	2,212,740

TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
RAILROADS (continued)					
1,000	BURLINGTON NORTHERN	11.625	08/15/15	976,872	1,106,370
40	BURLINGTON NORTHERN	9.625	10/01/87	40,000	41,109
84	FRUIT GROWERS EXPRESS	9.250	05/15/89	84,000	87,879
500	GENERAL AMERICAN TRANSPORTATION EQUIP TRUST S74	8.150	06/01/97	500,000	484,210
250	GENERAL AMERICAN TRANSPORTATION EQUIP TRUST S74	8.150	06/01/97	190,518	242,105
500	GENERAL AMERICAN TRANSPORTATION EQUIP TRUST S74	9.000	11/15/98	432,669	509,245
527	MISSOURI PACIFIC RR PP	9.750	06/01/94	527,715	580,269
200	PULLMAN TRANSPORT LEASING	7.750	06/15/92	200,000	197,192
400	SOUTHERN RR	7.375	11/15/91	395,872	387,504
300	ST LOUIS SOUTHWESTERN RY PP	9.000	08/01/91	300,000	408,960
166	TRAILER TRAIN PP	8.750	04/01/89	166,667	160,477
500	UNION PACIFIC RR	7.700	01/01/91	500,000	492,575
39	UNION TANK CAR	9.300	11/15/89	39,000	39,047
6,710	TOTAL RAILROADS			6,536,266	7,167,662
TRANSPORTATION, EXCL RAILROADS					
2,000	AMERICAN PRESIDENT CO LTD	11.000	01/15/96	2,000,000	2,126,020
280	CALIFORNIA & HAWAIIAN SUGAR CO SUGAR ISLANDER PP	8.250	08/24/93	280,751	265,689
2,000	CORTEZ CAPITAL CORP PP	12.625	05/15/03	2,000,000	3,043,980
800	EXXON PIPELINE CO.	9.000	10/15/04	611,055	799,800
500	EXXON PIPELINE CO.	9.000	10/15/04	430,717	499,875
1,000	EXXON PIPELINE CO.	9.000	10/15/04	765,381	999,750
100	LAKEHEAD PIPELINE	7.125	04/15/93	95,836	94,221
170	PLANTATION PIPELINE PP	4.500	02/01/94	154,190	132,129
162	PLANTATION PIPELINE PP	7.000	02/01/99	162,500	162,775
470	SOHIO BP TRANS ALASKA PIPELINE	9.750	12/01/99	488,809	480,523
250	SOHIO PIPELINE	8.750	05/01/01	195,893	240,352
7,732	TOTAL TRANSPORTATION, EXCL RAILROADS			7,185,132	8,845,114
UTILITIES					
500	ALABAMA POWER CO	10.500	12/01/05	500,000	523,355
573	BROOKLYN UNION GAS	4.375	05/28/88	551,345	526,352
1,000	CAROLINA POWER & LIGHT	12.875	12/01/13	960,926	1,147,540
2,000	CAROLINA POWER & LIGHT	12.875	12/01/13	1,981,710	2,295,080
500	CENTRAL ILLINOIS LIGHT	9.250	05/01/06	497,515	497,635
25	CENTRAL ILLINOIS PUBLIC SERVICE	4.750	01/01/89	24,136	23,592
100	CENTRAL ILLINOIS PUBLIC SERVICE	5.875	05/01/97	95,566	79,820
200	CENTRAL MAINE POWER	7.700	07/01/97	200,000	176,992
295	CENTRAL TEL DELAWARE	8.125	12/01/98	246,425	275,892
500	CENTRAL TEL FLORIDA	7.650	02/01/97	500,000	452,895
100	CHESAP & POTOMAC TEL MARYLAND	5.875	06/01/04	100,539	74,579



TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
UTILITIES (continued)					
225	CHESAP & POTOMAC TEL MARYLAND	5.250	05/01/05	226,197	152,905
200	CHESAP & POTOMAC TEL WEST VIRGINIA	9.000	05/15/15	189,424	194,952
1,000	CLEVELAND ELECTRIC ILLUM CO	16.625	03/01/12	986,077	1,167,450
1,000	CLEVELAND ELECTRIC ILLUM CO	12.250	06/01/13	986,542	1,097,720
1,000	CLEVELAND ELECTRIC ILLUM CO	12.250	06/01/13	986,542	1,097,720
1,000	CLEVELAND ELECTRIC ILLUM CO	12.250	06/01/13	986,542	1,097,720
1,000	CLEVELAND ELECTRIC ILLUM CO	12.250	06/01/13	976,363	1,097,720
200	COLUMBIA GAS SYSTEM	10.250	05/01/99	167,545	201,360
1,000	COLUMBIA GAS SYSTEM	11.750	10/01/99	881,037	1,012,310
500	COLUMBIA GAS SYSTEM	12.750	08/01/00	498,234	525,060
100	COMMONWEALTH EDISON	5.250	04/01/96	68,024	76,788
200	COMMONWEALTH EDISON	6.250	02/01/98	139,480	159,072
650	COMMONWEALTH EDISON	6.250	02/01/98	456,010	516,984
1,000	COMMONWEALTH EDISON	16.750	05/15/11	1,156,034	1,137,780
143	CONSOLIDATED NATURAL GAS	12.875	10/01/00	143,000	148,984
1,000	CONSOLIDATED NATURAL GAS	11.125	04/01/08	997,994	1,075,310
933	CONSUMERS POWER PP	10.625	07/01/99	933,000	987,207
50	DELAWARE POWER & LIGHT	4.625	10/01/94	50,240	38,918
150	DETROIT EDISON	6.000	12/01/96	150,000	119,535
50	DIAMOND STATE TEL	4.750	04/01/94	50,280	40,239
100	DUQUESNE LIGHT	5.125	02/01/96	100,349	77,064
1,000	EL PASO ELECTRIC PP	16.350	05/01/91	1,000,000	1,037,740
455	EQUITABLE GAS	8.950	05/01/04	915,000	898,154
1,000	EQUITABLE GAS	8.000	06/15/97	455,000	392,496
150	FLORIDA POWER & LIGHT	12.125	04/01/08	934,249	1,077,910
1,360	FLORIDA POWER CORP	5.000	12/01/95	119,917	118,074
1,000	GENERAL TEL CALIFORNIA	8.000	12/01/03	998,383	1,246,888
200	GENERAL TEL FLORIDA	9.375	06/15/26	980,007	1,000,000
876	GENERAL TEL KENTUCKY PP	7.500	08/01/02	198,968	175,496
500	GEORGIA POWER	13.750	12/01/00	876,000	1,175,101
100	GEORGIA POWER	7.875	06/01/03	354,538	430,330
50	HARTFORD ELECTRIC LIGHT	4.625	10/01/94	100,515	76,836
665	HOUSTON LIGHTING & POWER	4.250	04/01/93	49,915	38,615
500	HOUSTON LIGHTING & POWER	8.125	02/01/04	479,798	587,474
1,000	HOUSTON LIGHTING & POWER	11.250	12/01/09	427,383	538,355
65	IDAHO POWER	4.500	06/01/10	979,070	1,097,310
500	IDAHO POWER	4.500	10/15/88	63,816	61,072
50	ILLINOIS POWER CO	9.000	08/15/08	497,695	474,760
1,000	ILLINOIS POWER CO	5.850	10/01/96	46,486	38,885
1,000	INDIANAPOLIS POWER & LIGHT	12.000	11/15/12	981,997	1,118,250
500	INTERNATIONAL TEL & TEL	12.500	11/01/14	992,465	1,184,880
500	IOWA ILLINOIS GAS AND ELECTRIC	12.625	02/01/05	467,374	545,525
1,000	IOWA PUBLIC SERVICE	8.750	04/01/06	499,177	415,265
900	KANSAS CITY POWER & LIGHT	9.750	09/01/09	988,407	1,008,930
		7.625	05/01/02	602,021	759,816

## TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
UTILITIES (continued)					
2,000	LACLEDE GAS CO.	9.000	05/01/11	1,990,061	1,941,780
2,500	LONG ISLAND LIGHTING	4.550	06/01/95	500,000	324,375
2,000	MASSACHUSETTS ELECTRIC CO	9.750	06/01/16	2,000,000	2,090,080
2,000	MDU RESOURCES	11.250	11/15/10	2,000,000	2,121,320
400	MINNESOTA POWER & LIGHT	8.700	09/01/06	400,000	374,792
500	MINNESOTA POWER & LIGHT	8.350	09/01/07	500,000	454,140
500	MINNESOTA POWER & LIGHT	8.350	09/01/07	500,000	454,140
250	MONONGAHELA POWER	8.875	05/01/01	252,235	247,412
600	MONTANA POWER	7.500	04/01/01	601,009	505,674
500	MONTANA POWER	8.625	03/01/04	500,771	460,770
500	MONTANA POWER	9.875	01/01/09	497,320	496,650
500	MONTANA POWER	9.875	01/01/09	497,320	496,650
505	MOUNTAIN STATES TEL & TEL	7.875	11/15/16	377,082	450,884
1,500	NATIONAL RURAL UTILITIES	14.750	02/01/11	1,500,000	1,787,835
1,000	NATIONAL RURAL UTILITIES	14.750	02/01/11	984,577	1,191,890
500	NATIONAL RURAL UTILITIES	15.750	08/15/91	498,718	1,579,975
75	NEW ENGLAND TEL & TEL	4.500	07/01/02	68,094	47,355
4,000	NEW ENGLAND TEL & TEL	9.500	03/01/16	3,960,056	3,960,000
200	NEW YORK STATE ELECTRIC & GAS	6.250	09/01/97	194,832	157,552
400	NIAGARA MOHAWK POWER	8.250	12/01/03	288,444	347,140
1,000	NIAGARA MOHAWK POWER	12.500	06/15/13	1,000,000	1,110,720
500	NORTHERN ILLINOIS GAS CO	7.625	07/01/97	424,082	469,120
250	NORTHERN STATES POWER	4.375	09/01/93	249,925	204,825
350	NORTHWESTERN BELL TEL	7.500	04/01/05	232,719	331,464
150	OHIO BELL TEL	5.000	02/01/06	150,721	96,199
350	OHIO EDISON	9.500	05/15/08	348,084	327,187
200	OKLAHOMA GAS & ELECTRIC	7.125	01/01/02	142,653	172,702
950	OTTER TAIL POWER PP	13.375	11/01/05	950,000	1,285,540
500	OTTER TAIL POWER	9.625	11/01/08	500,000	484,535
190	PACIFIC GAS & ELECTRIC	8.000	06/01/03	124,515	170,602
1,000	PACIFIC GAS & ELECTRIC	7.750	06/01/05	690,873	887,250
500	PACIFIC GAS & ELECTRIC	10.125	08/01/12	499,015	518,995
1,000	PACIFIC GAS & ELECTRIC	11.250	11/01/18	991,412	1,093,400
200	PACIFIC TEL & TEL	4.625	05/01/00	195,331	133,308
25	PACIFIC TEL & TEL	6.500	07/01/03	16,319	19,609
500	PACIFIC TEL & TEL	9.875	02/15/16	500,000	510,830
100	PENNSYLVANIA ELECTRIC	4.625	10/01/94	100,481	76,342
500	PENNSYLVANIA POWER & LIGHT	7.500	01/01/03	498,967	428,545
300	PEOPLES GAS	7.625	04/15/97	246,881	279,636
100	PHILADELPHIA ELECTRIC	7.750	12/15/00	74,094	85,000
100	POTOMAC EDISON	7.500	12/01/02	73,323	88,024
50	POTOMAC ELECTRIC POWER	4.625	12/01/93	50,416	40,568
100	POTOMAC ELECTRIC POWER	4.500	05/15/99	100,000	67,842
400	POTOMAC ELECTRIC POWER	4.500	05/15/99	293,857	271,368
50	PUBLIC SERVICE COLORADO	4.500	10/01/91	50,174	42,396



## TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
UTILITIES (continued)					
500	PUBLIC SERVICE COLORADO	9.250	10/01/08	500,000	492,920
995	PUBLIC SERVICE INDIANA	14.750	02/01/11	964,390	1,101,604
974	PUBLIC SERVICE INDIANA	15.750	12/01/11	940,639	1,100,620
200	PUBLIC SERVICE NEW HAMPSHIRE	7.625	06/15/02	200,000	146,194
2,000	PUBLIC SERVICE OKLAHOMA	9.000	05/01/16	1,990,044	2,009,920
50	PUBLIC SERVICE ELECTRIC & GAS	4.375	11/01/86	49,948	49,475
10	PUBLIC SERVICE ELECTRIC & GAS	4.625	08/01/88	9,935	9,497
550	PUBLIC SERVICE ELECTRIC & GAS	8.750	04/01/06	414,006	539,753
50	PUGET SOUND POWER & LIGHT	4.625	11/01/93	50,045	38,770
100	ROCHESTER GAS & ELECTRIC	4.500	11/15/91	100,354	83,396
50	SAN DIEGO GAS & ELECTRIC CO	5.500	09/01/94	50,000	41,415
50	SAN DIEGO GAS & ELECTRIC CO	5.500	09/01/94	44,127	41,415
500	SOUTH CAROLINA ELECTRIC & GAS	10.125	04/01/09	496,198	507,675
300	SOUTH CENTRAL BELL TEL	8.250	12/01/04	216,690	283,749
550	SOUTH CENTRAL BELL TEL	8.250	12/01/04	417,504	520,206
25	SOUTHERN BELL TEL & TEL	4.375	03/01/98	23,119	17,457
1,000	SOUTHERN BELL TEL & TEL	16.000	11/01/21	1,159,192	1,141,870
250	SOUTHERN CALIFORNIA EDISON	6.125	08/15/91	205,497	231,562
400	SOUTHERN NEW ENGLAND TEL	7.750	06/01/04	291,586	355,868
250	SOUTHERN NEW ENGLAND TEL	8.125	05/01/08	247,785	227,000
1,000	SOUTHERN UNION	12.875	09/15/05	1,009,538	1,067,040
100	SOUTHWESTERN BELL TEL	6.750	06/01/08	60,770	78,619
500	SOUTHWESTERN PUBLIC SERVICE	8.750	03/01/08	500,000	478,915
3,000	TEXAS UTILITIES ELECTRIC CO	9.750	05/01/16	2,985,058	3,013,770
3,000	TEXAS UTILITIES ELECTRIC CO	9.750	05/01/16	2,966,357	3,013,770
250	TUCSON GAS & ELECTRIC PP	4.550	02/01/95	250,000	221,612
300	UNION ELECTRIC	4.500	11/01/93	300,542	237,549
114	UNITED TEL INDIANA PP	9.125	04/01/00	114,500	92,872
20	UNITED TEL MISSOURI PP	7.875	06/01/03	20,000	17,469
395	UNITED TEL NORTHWEST PP	10.750	09/01/99	395,000	435,329
116	UNITED TEL PENN PP	9.750	06/01/00	116,500	96,457
600	UTAH POWER & LIGHT	7.500	05/01/02	600,000	539,088
500	UTAH POWER & LIGHT	10.250	11/01/05	501,615	499,025
1,200	UTAH POWER & LIGHT	9.125	05/01/08	1,200,000	1,153,272
1,000	UTAH POWER & LIGHT	16.375	12/01/11	985,152	1,148,100
1,000	UTAH POWER & LIGHT	16.375	12/01/11	978,737	1,148,100
1,000	UTAH POWER & LIGHT	13.000	12/01/12	1,000,000	1,137,260
1,000	UTAH POWER & LIGHT	13.000	12/01/12	1,000,000	1,137,260
1,150	VIRGINIA ELECTRIC POWER	4.500	05/01/95	1,149,723	1,113,224
400	WASHINGTON WATER POWER	4.625	09/01/94	400,000	304,064
300	WEST PENN POWER	4.875	12/01/95	203,161	234,561
200	WISCONSIN MICHIGAN POWER	5.875	08/01/96	188,250	161,394
150	WISCONSIN NATURAL GAS	4.875	10/01/90	140,640	128,746
100	WISCONSIN NATURAL GAS	4.875	10/01/90	100,123	85,831
100	WISCONSIN NATURAL GAS	8.750	09/15/94	100,535	96,866

TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
CORPORATE BONDS (continued)					
UTILITIES (continued)					
25	WISCONSIN TEL CO	4.875	05/01/95	23,939	19,709
85,699	TOTAL UTILITIES			82,070,817	86,881,401
224,759	TOTAL CORPORATE BONDS			212,406,105	232,944,323
MUNICIPAL BONDS					
1,194	SRS BUILDING LEASE-PURCHASES)	9.000	11/01/96	1,194,166	1,194,000
1,194	TOTAL MUNICIPAL BONDS			1,194,166	1,194,000
US GOVERNMENT OBLIGATIONS					
US AGENCIES					
100	DAVERN PARK APTS INC	5.150	04/01/05	101,031	71,783
800	FEDERAL FARM CREDIT BANKS	9.900	01/20/87	795,521	813,000
248	FEDERAL HOME LOAN MORTGAGE CORP	8.200	09/15/07	247,118	230,640
1,000	FEDERAL NATIONAL MORTGAGE ASSOCIATION	8.550	09/12/88	998,125	1,027,500
1,500	FHLB DISCOUNT NOTES	6.370	08/29/86	1,469,212	1,484,595
2,000	FNMA DISCOUNT NOTES	6.300	08/01/86	1,971,650	1,989,280
100	GATEWAY MANOR INC.	5.000	02/01/04	100,000	71,193
75	GNMA 136619	10.000	12/15/15	75,141	76,641
785	GNMA 29174	9.000	11/15/08	646,536	763,655
22	GNMA 29781	10.000	11/15/09	22,234	22,481
439	GNMA 31195	9.000	03/15/09	367,611	427,063
926	GNMA 46249	10.000	12/15/10	916,206	946,260
860	GNMA 65111	11.500	05/15/13	829,407	907,566
809	GNMA 66624	11.500	05/15/13	780,251	853,745
898	GNMA 68950	10.000	07/15/13	888,444	917,648
293	GULF RESTON PROPERTIES PP	7.950	12/20/93	293,058	290,559
1,500	LNG CAPRICORN USGG	8.950	06/22/03	1,496,280	1,493,460
1,340	LNG CAPRICORN USGG	8.950	06/22/03	1,091,107	1,334,157
3,675	MORSE STEAMSHIP TITLE XI	9.400	08/28/04	3,665,860	3,706,053
3,400	PATRIOT I SHIPPING CORP SER 8 US GG SHIP FINANCING B	8.000	09/07/03	339,150	365,260
105	TWO BUTTES WATER FHA MORTGAGE	8.750	03/12/10	105,861	112,120
2,818	US GG SHIP FINANCING BONDS FOURTH TUG BARGE CORP	11.800	12/31/08	2,818,000	3,743,910
91	WALNUT CREEK MANOR	5.150	10/01/04	91,000	65,625
20,784	TOTAL US AGENCIES			20,108,803	21,714,194
US TREASURY ISSUES					
2,000	US TREASURY BILLS	6.120	10/23/86	1,940,160	1,974,160

TEACHERS RETIREMENT SYSTEM (Continued)

PAR VALUE (000)	SECURITY	INTEREST RATE	MATURITY DATE	BOOK VALUE	MARKET VALUE
US GOVERNMENT OBLIGATIONS (continued)					
US TREASURY ISSUES (continued)					
2,000	US TREASURY NOTES	10.750	07/15/90	1,944,112	2,220,620
2,000	US TREASURY NOTES	11.750	11/15/93	1,930,085	2,451,240
2,000	US TREASURY NOTES	11.375	02/15/89	1,995,710	2,195,620
2,000	US TREASURY NOTES	11.750	01/15/91	2,009,855	2,315,620
1,000	US TREASURY NOTES	11.750	05/15/89	997,667	1,113,750
1,000	US TREASURY NOTES	12.375	04/15/91	999,893	1,189,690
1,000	US TREASURY NOTES	12.375	04/15/91	963,797	1,189,690
2,000	US TREASURY NOTES	12.375	04/15/91	1,963,447	2,379,380
2,000	US TREASURY NOTES	12.375	04/15/91	2,054,209	2,379,380
3,000	US TREASURY NOTES	13.125	05/15/94	2,950,511	3,946,800
2,000	US TREASURY NOTES	13.125	05/15/94	1,972,333	2,631,200
2,700	US TREASURY NOTES	13.750	07/15/91	2,703,995	3,380,913
3,000	US TREASURY NOTES	12.750	11/15/89	2,996,340	3,464,070
250	US TREASURY NOTES	11.625	11/15/94	245,323	310,000
2,000	US TREASURY NOTES	11.625	01/15/92	2,224,473	2,353,740
4,600	US TREASURY NOTES	10.375	02/15/88	4,680,951	4,840,074
2,000	US TREASURY NOTES	11.250	02/15/95	2,381,830	2,443,740
2,500	US TREASURY NOTES	11.375	05/15/90	2,493,591	2,818,750
2,000	US TREASURY NOTES	10.375	07/15/92	1,995,644	2,263,740
2,000	US TREASURY NOTES	8.750	01/15/93	1,970,195	2,127,500
2,000	US TREASURY NOTES	8.750	01/15/93	1,949,642	2,127,500
2,000	US TREASURY NOTES	8.750	01/15/93	2,021,983	2,127,500
47,050	TOTAL US TREASURY ISSUES			47,385,746	54,244,677
67,834	TOTAL US GOVERNMENT OBLIGATIONS			67,494,549	75,958,871
50,750	MONTANA COMMON STOCK POOL			50,749,649	96,917,121
54,742	MORTGAGES			54,742,116	54,742,116
COMMON STOCK					
0	DEVELOPMENT CORP OF MONTANA, 1620 SHARES	0.000	.	162,000	162,000
0	TRITON GROUP LTD., 665 SHARES	0.000	.	166	998
0	TOTAL COMMON STOCK			162,166	162,998
LAND & BUILDINGS					
35	LAND	0.000	06/30/87	35,376	35,000
101	TRS BUILDING	0.000	06/30/87	97,622	101,000
136	TOTAL LAND & BUILDINGS			132,998	136,000
427,915	TEACHERS RETIREMENT SYSTEM (TOTAL)			415,031,563	490,416,300



STATISTICAL

CONTRIBUTION RATES

REVENUES

EXPENDITURES

SUMMARY OF ADMINISTRATIVE EXPENSES

ACTIVE MEMBERS

RETIRED MEMBERS

LOCATION OF BENEFIT RECIPIENTS





CONTRIBUTION RATES

<u>EMPLOYEE</u>			<u>EMPLOYER</u>
1937 - 1973	5.000%	1937 - 1945	None
1973 - 1975	5.125%	1945 - 1959	3.75%
1975 - 1977	6.125%	1959 - 1969	4.00%
1977 - 1983	6.187%	1969 - 1971	4.50%
1983 -	7.044%	1971 - 1973	5.125%
		1973 - 1975	5.25%
		1975 - 1977	6.25%
		1977 - 1981	6.312%
		1981 - 09/30/81	6.432%
		10/01/81 - 06/30/83	6.463%
		07/01/83 - 06/30/85	7.320%
		07/01/85 -	7.428%

UNLESS OTHERWISE NOTED, CONTRIBUTION RATE CHANGES OCCUR ON JULY 1.

# REVENUES BY SOURCE

<u>YEAR</u>	<u>EMPLOYEE CONTRIBUTIONS</u>	<u>EMPLOYER CONTRIBUTIONS</u>	<u>INVESTMENT INCOME</u>	<u>OTHER</u>	<u>TOTAL</u>
1978 - 1979	\$14,474,092	\$13,559,158	\$13,279,868	\$	\$41,313,118
1979 - 1980	15,516,112	14,568,361	14,945,231	33,195	45,062,899
1980 - 1981	16,674,792	15,780,560	18,141,767		50,597,119
1981 - 1982	18,230,806	17,880,140	21,825,559		57,936,505
1982 - 1983	20,786,014	20,158,344	25,916,847		66,861,205
1983 - 1984	25,018,366	24,103,285	30,338,736		79,460,387
1984 - 1985	26,630,671	26,104,746	35,253,551		87,988,968
1985 - 1986	27,603,165	27,322,124	45,270,441		100,195,730

# EXPENDITURES

<u>YEAR</u>	<u>BENEFITS PAYMENTS</u>	<u>WITHDRAWALS</u>	<u>ADMIN. EXPENSES</u>	<u>INVESTMENT EXPENSES</u>	<u>OTHER*</u>	<u>TOTAL</u>
1978 - 1979	\$17,294,104	\$3,627,872	\$251,490	\$	\$ 93,885	\$21,267,351
1979 - 1980	18,942,752	3,876,793	261,232		50,532	23,131,309
1980 - 1981	20,599,213	4,742,599	270,669	67,032	132,637	25,812,150
1981 - 1982	24,701,020	5,893,999	324,661	82,270	112,866	31,114,816
1982 - 1983	25,957,774	3,405,461	320,960	93,422	372,869	30,105,768
1983 - 1984	28,791,213	4,230,672	489,981	100,580	493,322	34,105,768
1984 - 1985	32,498,499	4,812,090	334,023	(1)		37,644,612
1985 - 1986	37,633,013	4,647,911	378,827	(1)		42,659,751

\* INCLUDES PRIOR YEAR ADJUSTMENTS AND DEPRECIATION THROUGH 1984

(1) includes depreciation

TEACHERS' RETIREMENT SYSTEM

SUMMARY OF ADMINISTRATIVE EXPENSES

JULY 30, 1985 TO JUNE 30, 1986

RESPONSIBILITY CENTER 301

Personal Services:			
Per Diem	<u>250.00</u>	250.00	
Operating Expenses			
Contracted Services	3,092.00		
Travel	<u>351.78</u>	<u>3443.78</u>	\$3,693.78

RESPONSIBILITY CENTER 3600

Personal Services:			
Salaries	181,572.08		
Other Compensation	2,400.00		
Employee Benefits	<u>38,966.38</u>	222,938.46	
Operating Expenses:			
Contracted Services	58,091.21		
Supplies and Materials	7,780.37		
Communications	26,180.24		
Travel	6,235.15		
Rent	20,919.22		
Utilities	3,497.15		
Repair & Maintenance	8,198.67		
Other Expenses	<u>911.26</u>	131,813.27	
Equipment:	<u>1,389.01</u>	<u>1,389.01</u>	356,140.74

RESPONSIBILITY CENTER 3601

Personal Services:			
Compensated Absences	<u>2,545.00</u>	2,545.00	
Operating Expenses:			
Contracted Services	1,536.00		
Supplies and Materials	5,757.00		
Utilities	3,497.14		
Repairs & Maintenance	5,742.00		
Taxes and Assessments	<u>38.39</u>	16,570.53	
Equipment:	<u>2,394.00</u>	2,394.00	<u>21,509.53</u>

RESPONSIBILITY CENTER 3603

Depreciation	6,458.00		6,458.00
Equipment	(8,976.00)		<u>(8,976.00)</u>
TOTAL			<u>\$378,826.05</u>

MEMBERSHIP

<u>PERIOD ENDED</u>	<u>ACTIVE MEMBERS</u>	<u>INACTIVE VESTED MEMBERS</u>	<u>INACTIVE NON-VESTED</u>	<u>TOTAL</u>
JUNE 30, 1980	14,939	745	2,445	18,129
JUNE 30, 1981	14,793*	754*	2,457*	17,984*
JUNE 30, 1982	14,852	722	1,983	17,557
JUNE 30, 1983	14,934*	723*	2,051*	17,708*
JUNE 30, 1984	15,214	748	2,148	18,110
JUNE 30, 1985	15,579	714	2,245	18,238
JUNE 30, 1986	15,951	695	2,362	19,008

RETIRED MEMBERS AND BENEFIT RECIPIENTS<sup>1</sup>

<u>PERIOD ENDED</u>	<u>RETIREMENT</u>	<u>SURVIVORS</u>	<u>DISABILITY</u>	<u>CHILD BENEFITS</u>	<u>TOTAL</u>
JUNE 30, 1980	4,040	251	195	50	4,536
JUNE 30, 1981	4,136*	267*	220*	45*	4,668*
JUNE 30, 1982	4,336	268	223	42	4,869
JUNE 30, 1983	4,451*	279*	227*	42*	4,999*
JUNE 30, 1984	4,653	294	227	46	5,220
JUNE 30, 1985	4,936	302	235	51	5,524
JUNE 30, 1986	5,158	311	239	58	5,766

\* TOTALS WILL NOT AGREE WITH THOSE SHOWN IN THE ACTUARIAL SECTION DUE TO THE DIFFERENT TIME FRAMES FROM WHICH THE INFORMATION WAS EXTRACTED.

1 - This information includes tax sheltered annuities.



LOCATION OF BENEFIT

RECIPIENTS, 12-09-86

Alabama	2	Nebraska	3
Alaska	10	Nevada	23
Arizona	143	New Jersey	2
Arkansas	1	New Mexico	14
California	188	New York	11
Colorado	47	North Carolina	7
Connecticut	4	North Dakota	76
District of Columbia	1	Ohio	6
Florida	23	Oklahoma	11
Georgia	4	Oregon	108
Hawaii	4	Pennsylvania	5
Idaho	60	Rhode Island	1
Illinois	11	South Carolina	1
Indiana	2	South Dakota	24
Iowa	8	Tennessee	7
Kansas	7	Texas	29
Kentucky	3	Utah	18
Louisiana	3	Virginia	11
Maine	1	Washington	202
Maryland	4	West Virginia	2
Massachusetts	5	Wisconsin	19
Michigan	5	Wyoming	35
Minnesota	67	Canada	7
Missouri	14	Japan	<u>1</u>
Montana	4,738	TOTAL	<u>5,978</u>











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